REMARKS

The Applicant has reviewed the Office Action dated November 30, 2004. The Applicant has amended claims 23 and 24. The Applicant hereby provides the following remarks concerning the Examiner's rejection of the claims under 35 U.S.C. §103(a) and §112, second paragraph.

The Examiner has rejected claims 23 and 24 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedent basis:

The sections threads - claim 23 and claim 24;

The Examiner has rejected claims 23 and 24 because the terms "the sections threads" lack antecedent basis. The Applicant does not use the word "sections" and assumes the Examiner means "sessions". The Applicant has amended claims 23 and 24 to change "sessions" to "session" thereby establishing proper antecedent basis to overcome the Examiner's rejection.

The Examiner has rejected claims 1-3, 5-7, 21, and 22 under 35 U.S.C. 103(a) as being unpatentable over Patki et al. (US Patent 6,343,321 b2).

As to claim 1, the Examiner asserts that Patki teaches the invention substantially as claimed including: a computer to manage communication over a network between the computer and a plurality of physical devices (col 4, ln 4-8/Fig. 1) comprising:

Opening a framework for one or more network addressable unit objects with a network addressable unit object (col 5, ln 64-67), network address unit object (RTP socket 308, col 5, ln 35-36/col 6, ln 30-34), one or more virtual line replacement units (data channel 402 and control channel 404, col 6, ln 37-41);

Creating one or more virtual line replacement units in a network addressable unit (col 9, ln 45-47 and col 10, ln 1-4);

managing communication between a transaction dispatcher and one or more physical devices through message processor with the one or more virtual line replaceable unit (col 3, ln 60-65/col 5, ln 13-16/col 6, ln 30-34), a message processor (message processor, col 5, ln 12-16);

7

Communicating network message through the network though the network addressable unit objects to the message processor (col 1, ln 66-67 and col 2, ln 1-5/col 6, ln 37-40), one or more physical devices (other data devices, col 3, ln 56-57). The Examiner states that Patki does not teach the term dispatch. However, Patki teaches dispatcher (service provider or two way data message transmitter, col 3, ln 60-63/col 5, ln 14-15). The Examiner believes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Patki because Patki's service provider or two way data message transmitter would provides data communication services through the world wide packet data communication network.

Regarding the Examiner's rejection of claim 1, Patki does not have network addressable unit objects and does not disclose creating virtual line replaceable units in a network addressable unit. The Examiner asserts that the data channel 402 and control channel 404 are virtual line replacement units (VLRUs) as claimed by the Applicant. This is wrong. The data channel 402 and the control channel 404 are push and pull data sources that manage data flow (see col. 7, line 26 through col. 8 line 19) and are not VLRUs that are created for each physical device connected to the computer and communicated with as disclosed by the Applicant. The VLRU for each physical device manages communications between the transaction dispatcher and the physical device through the message processor. For example, a VLRU is created for a printer in Applicant's invention. Nowhere in Patki is there disclosure of VLRUs as claimed by the Applicant. Claim 1 is not rendered obvious by Patki and is believed to be allowable.

As to claim 2, the Examiner asserts that Patki teaches the network addressable unit dispatch object perform the step of tracking message to the one or more physical devices utilizing a queue (col 9, ln 47-52 and col 10, ln 43-49).

Claim 2 depends on claim 1 believed to be allowable thereby making claim 2 allowable.

As to claim 3, the Examiner states that it is an apparatus claim of claim 2; therefore, it is rejected for the same reason as claim 2 above.

Claim 3 is not an apparatus claim of claim 2 as asserted by the Examiner. It is a method claim claiming the step of tracking messages from the one or more physical devices. Furthermore, claim 3 depends on claim 1 believed to be allowable thereby making claim 3 allowable.

As to claim 5, the Examiner assert that Patki teaches a virtual line replacement unit performs the step of maintaining the status of related devices (col 2, ln 6-9).

As discussed above in the remarks for claim 1, Patki does not disclose virtual line replaceable units for each physical device and furthermore does not disclose a virtual line replaceable unit maintaining the status of its related device. Claim 5 depends on claim 1, now believed allowable thereby making claim 5 allowable.

As to claim 6, the Examiner asserts that Patki teaches the network addressable unit dispatch object performs the step of adding and removing one or more virtual line replacement units (col 8, ln 10-14 and ln 54-58).

As discussed above in the remarks for claim 1, Patki does not disclose virtual line replaceable units for each physical device and furthermore does not disclose adding and removing one or more virtual line replaceable units. The column and lines the Examiner refers to merely describe the control and data channels. Furthermore claim 6 depends on claim 1, believed to be allowable thereby making claim 6 allowable.

As to claim 7, the Examiner asserts that Patki teaches the network addressable units perform the step of moving data from one storage location to another (col 2, ln 1-5).

Claim 7 depends on claim 1 believed to be allowable thereby making claim 7 allowable.

As to claim 21, the Examiner states it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim1 above. In addition, the Examiner believes that Patki teaches a common format (col 5, ln 55-60).

As discussed above in the remarks for claim 1, Patki does not disclose virtual line replaceable units for each physical device. Claim 21 is allowable for the same reasons as claim 1 above.

9

As to claim 22, the Examiner asserts that Patki teaches session threads that are started for each virtual line replacement unit (col 7, ln 48-60), named pipes that are opened between the message processor, the session threads, and the transaction dispatcher to manage input and output between them (col 8, ln 64-67).

As discussed above in the remarks for claim 1, Patki does not disclose virtual line replaceable units for each physical device. Furthermore claim 22 depends on claim 21 believed to be allowable thereby making claim 22 allowable.

Claims 4, 8, 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patki et al (US Patent 6,343,321 b2) in view of Enescu (US Patent 5,287,444).

As to claim 4, the Examiner asserts that Patki does not teach the message processor perform the step of converting messages from a first format to a second format. However, the Examiner then states that Enescu teaches the message processor perform the step of converting messages from a first format to a second format (the message processor will then find the corresponding entry in such other message repository and use that entry to provide the fixed fields and format for the formatted message, col 4, ln 10-15).

The Examiner believes that it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Patki and Enescu because Enescu's converting messages from a first format to a second format would provide a message processing system larger applications which did not need to be recompiled or re-link-edited for each change.

As discussed above in the remarks for claim 1, Patki does not disclose virtual line replaceable units for each physical device. Furthermore, claim 4 depends on claim 1, believed to be allowable thereby making claim 4 allowable.

As to claim 8, the Examiner asserts that it is an apparatus claim of claim 1; therefore, it is rejected same reasons as claim 1 above. In addition, the Examiner states that Patki teaches a system server (server 126, col 4, ln 7-8, Fig. 1).

Since claim 8 is an apparatus claim 1 of claim 1, it is allowable for the same reasons as claim 1.

As to claims 9-14, the Examiner states that they are apparatus claims of claims 2-7; therefore, they are rejected for the same reasons as claims 2-7 above.

10

Since claims 9-14 are apparatus claims of claims 2-7, they are allowable for the same reasons as claims 2-7 above.

Claims 23 and 24 are rejected by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Patki et al (US Patent 6,343,321 b2) in view of Duvall et al (US Patent 5,884,033).

As to claims 23, 24, the Examiner asserts that Patki teaches right thread/left thread wait and look up for incoming message (col 9, ln 47-53), a VLRU name and NAU object ID (col 9, ln 30-35).

The Examiner asserts that Patki does not teach outgoing for the message, read a NAU object ID. However, the Examiner states that Duvall teaches outgoing for the message, read a NAU object (outgoing message, checking information in the message: interface port and IP address, col 1, ln 25-45).
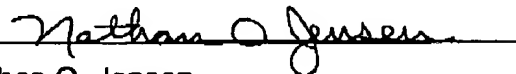
The Examiner believes it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Patki and Durall because Durall's "outgoing message, checking information in the message: interface port and IP address" would monitor transmission to search a particular command on a server in a network to which the client coupled.

Claims 23 and 24 depend on claim 21, believed to be allowable through intervening claim 22 thereby making claims 23 and 24 allowable.

11

CONCLUSION

The Applicant has amended claim 23 and 24 and provided remarks in response to the Examiner's rejections. The application is now believed to be in a condition for allowance. In light of the foregoing, reconsideration of the claims is hereby requested, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

Nathan O. Jensen
Attorney for Applicant
Reg. No. 41,460

Rockwell Collins, Inc.
Intellectual Property Department
400 Collins Road NE M/S 124-323
Cedar Rapids, IA 52498
Telephone: (319) 295-1184
Facsimile: (319) 295-8777
Customer No. 26383

12